

ML-POWERED APPROACH TO REVOLUTIONIZING DEBT RECOVERY

Fintech startup improved its debt collection efficiency with Altysys' ML-powered predictive solution

About the company

A fintech startup.



BUSINESS NEED

Fintech lenders face the critical challenge of ensuring timely loan repayments to maintain financial stability and minimize losses. However, predicting whether customers will pay their outstanding bills or debts within the designated timeframe remains challenging. Traditional collection strategies rely on manual processes and static credit risk assessments, leading to inefficiencies and increased operational costs. To address these challenges, our client sought Altysys' team to develop an advanced machine learning-driven solution to enhance its loan repayment prediction capabilities. The primary objectives were to:

- ◆ Accurately forecast the likelihood of a customer making a payment within 30 days
- ◆ Streamline collection workflows while reducing manual interventions
- ◆ Optimize debt recovery rates and operational effectiveness

SOLUTION

The Altysys team conducted a comprehensive needs assessment, crafted a solution roadmap, and executed these key initiatives:

- ◆ Developed a classification model leveraging historical payment data, account status, and communication records (texts, calls, payments) to predict loan repayment likelihood.
- ◆ Integrated multiple data sources, including accounts, text logs, call logs, and payment history, to train an ML model with a recall of 40% and precision of 73%.
- ◆ Planned future enhancements by incorporating NLP techniques to analyze call transcripts and text interactions, utilizing large language models (LLMs) to improve prediction accuracy and model performance.

TECH STACK

Python, SQL, Mlflow, Databricks Runtime ML

BUSINESS IMPACT

Higher collection efficiency, minimizing manual effort

Increased payment success rate, covering 69% of the debt amount

Boosted billing team productivity

ABOUT ALTYSYS:

Altysys is a trusted cloud, data, and AI partner for businesses pursuing small to large transnational digital transformation programs. From data engineering to AI enabled solutions, we have the capabilities you need to realize key business outcomes with enterprise data across your technology initiatives.

CASE STUDY